



Moths of Poole Harbour is a project of Birds of Poole Harbour

Clearwing Moth Pheromone Study 2020

The 'Moths of Poole Harbour' (MoPH) project was set up in 2017 to gain knowledge of moth species occurring in Poole Harbour, Dorset, their distribution, abundance and to some extent, their habitat requirements. The study area shares the same boundaries as the Birds of Poole Harbour (BoPH) project.

The MoPH project was primarily aimed at nocturnal species using light traps running overnight in locations around Poole Harbour. It is possible to attract some day-flying species of moth using pheromone lures and the MoPH project used this method for a limited time during the project.

A set of pheromone attractant lures, aimed primarily at Clearwing moths was used in June and July 2020 to look for species across the Poole Harbour recording area.

The pheromones can be purchased from Anglian Lepidopterist Supplies. The lures consist of a rubber bung or in some cases a small plastic vial impregnated with the relevant pheromone. Each lure can be put into a small porous net bag and is hung out by day to attract Clearwing species. Constant vigilance is maintained around the lures as, dependent on the species, some visits by target moths can be brief. Storage when not in use requires a freezer and individual sealed containers. It is important to label the lures as otherwise there is no way of telling which lure will attract which species of moth.

Success was achieved for 4 species of Clearwing but a large number of sites produced negative results. This is not definitive proof of absence of course, but it is considered of value to account for all locations that were sampled.

At each site sampled a minimum of 1 hour was given to each location.

The following four species were all attracted to lures.

Six-belted Clearwing

The larvae feed on Bird's-foot Trefoil and Kidney Vetch. It is likely that it can be found at many short-turfed sites. The species responds extremely quickly and at Hatch Pond on the western meadow alongside the road the response was timed on one occasion at 24 seconds! Up to 6 adults responded to the lure.

The species was looked for on the nearby Nuffield Estate where it again proved easy to locate. There are some nice herb-rich grass verges here and it is likely that most of them containing Bird's-foot Trefoil would produce the species.

The moth was also found at the community playing field between Christopher Crescent and the allotments. The three locations in 2020 constitute the only records from the Poole Harbour recording area in Living Record for this century.



Additional apparently promising sites where the moth was not attracted to pheromone were Luscombe Valley Local Nature Reserve (grid ref SZ046890), Holton Lee, Admiralty Park Industrial Estate next to Holton Heath (grid ref: SY952909), Pockets Park (grid ref: SZ 007950) which held extremely promising-looking grassland and Carey Estate. It was not possible to visit Ballard during the season where it is considered quite likely the species may be found.

Red-tipped Clearwing

The larvae feed on Osiers and other Willows including Goat Willow, Grey Willow and Creeping Willow. Found quite readily at Hatch Pond and Pocket Park, Broadstone.



This species was looked for unsuccessfully at Luscombe Valley Local Nature Reserve, Holton Lee (2 locations), Carey Estate (3 locations), Arne Moors, Corfe River Meadow, Slepe Heath and Coombe Heath.

Yellow-legged Clearwing

The larvae feed mainly on Oak but also a variety of other broadleaved trees. Two were attracted to the 'Ves' lure at Hatch Pond on separate occasions. The photo below shows a male.



This proved to be the sole location despite the lure also being tried at Luscombe Valley Local Nature Reserve, Holton Lee, Carey Estate, Arne, Corfe River Meadow and Slepe Heath.

Orange-tailed Clearwing

The larvae feed on Wayfaring Tree, and less often Guelder Rose. Surprisingly, one was lured to the 'Ves' lure at Carey Estate. The whereabouts of the foodplants is uncertain but is presumed to be present somewhere on the site.



This is apparently the only record for the Poole Harbour recording area this century.

During the course of the season a new pheromone became available for Lunar Hornet Moth (Hornet Clearwing) a species known to be present on Brownsea Island. The lure was obtained late in the season but did not prove successful on sites tried (including Carey Estate, Corfe River Meadow, Slepe Heath, Holton Lee and Hatch Pond). Apparently results produced are excellent (Marcus Lawson pers. comm.) and it is very likely that this species will be recorded far more in coming years.

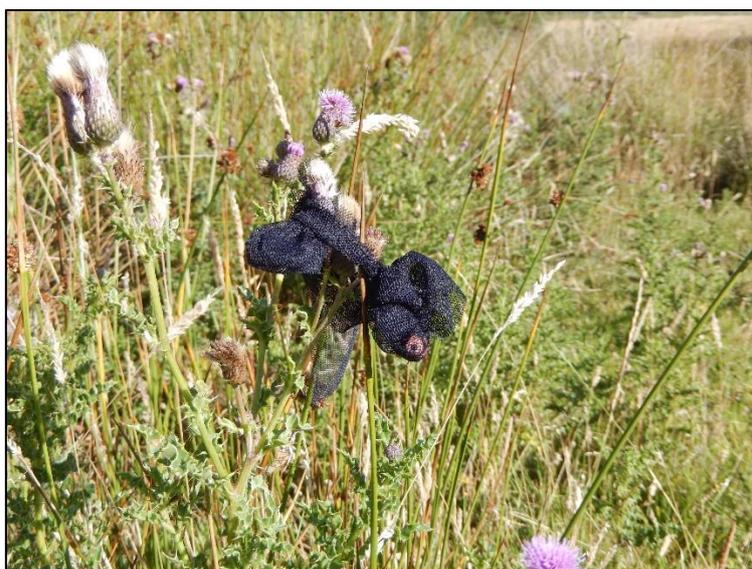
The following table shows locations sampled, unsuccessfully, for Clearwing species:

Sites surveyed with pheromone lures in 2020 that produced negative results

SITE NAME	GRID REF	TARGET SPECIES
Broadstone allotments	SZ006951	Currant Clearwing
Bushell Mill allotments	SZ011929	Currant Clearwing
Tatnam Farm allotments	SZ016921	Currant, Yellow-legged Clearwing
Luscombe Valley LNR	SZ047892	All species
Admiralty Park Industrial Estate, Holton Heath	SY952909	Six-belted, Red-tipped, Yellow-legged Clearwing
Carey Estate		All species, incl. Lunar Hornet Clearwing
Arne Moors		All species
Wareham allotments	SY926875	Currant Clearwing
Lectenbury Farm Pick-your-own	SY939842	Currant Clearwing
Corfe River Meadow	SY965846 SY967847	All species
Slepe Heath	SY946858 SY957861	All species
Arne RSPB reserve	SY972874	All species
Hyde's Heath	SY968877	All species
Holton Lee		Red-tipped, Six-belted, Lunar Hornet Clearwing

Acknowledgements

Moths of Poole Harbour would like to thank Joe Parker, Malcom Barrett, Katy Barrett and Christine Arnold for assistance in the field. Photos by Abby Gibbs and Chris Thain.



Pheromone lure in use at Arne Moors